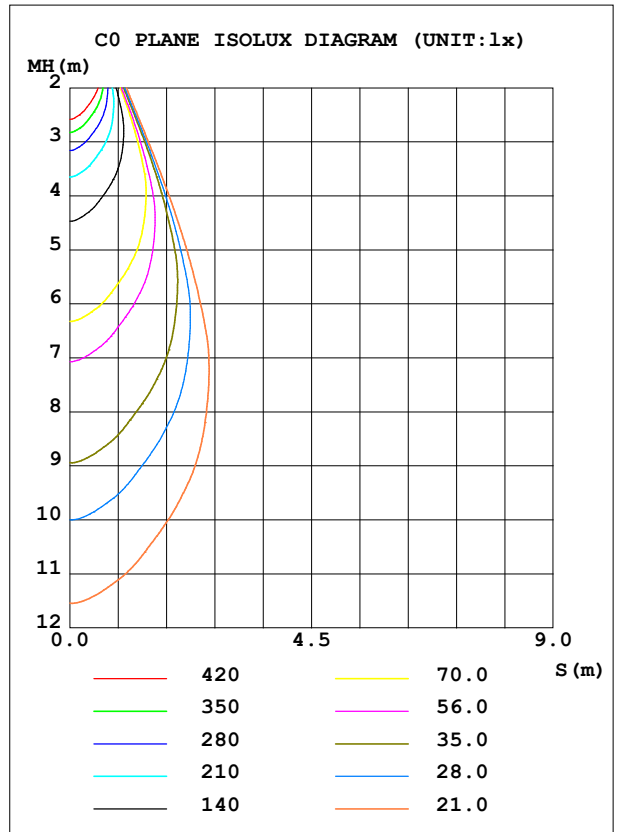
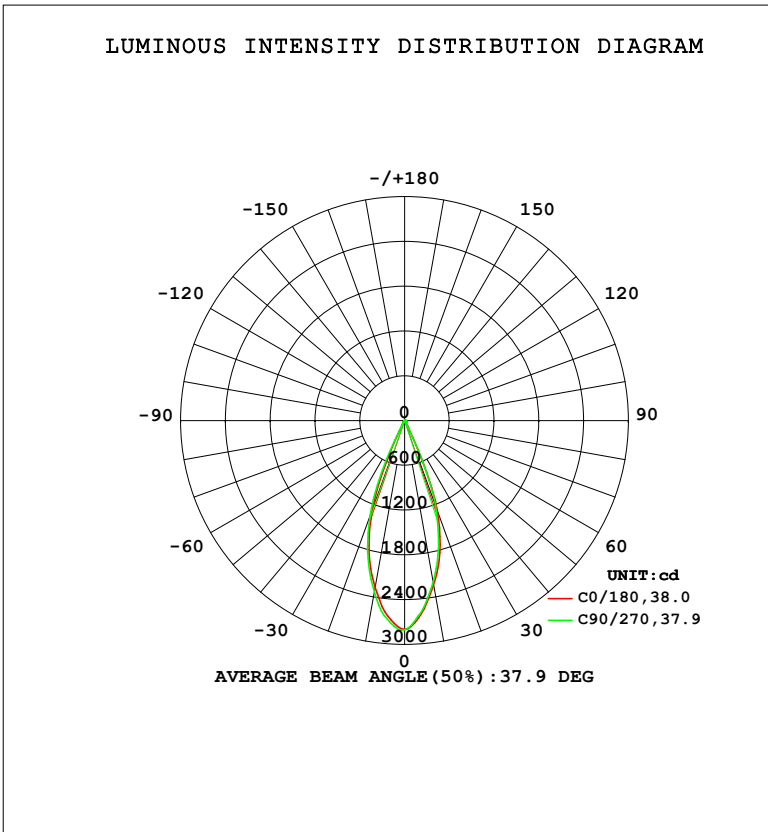


**LUMINAIRE PHOTOMETRIC TEST REPORT**

Test:U:119.78V I:0.1137A P:13.422W PF:0.9858 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1047.95x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	TYPE:	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	AD-3-S15W-FC-5CCT-WH	Imax (cd)	2810	S/MH (C0/180)	0.59
NOMINAL POWER (W)	15	LOR (%)	100.0	S/MH (C90/270)	0.61
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	1048.0	$\eta$ UP, DN (C0-180)	0.0,48.5
NOMINAL FLUX (lm)	1047.95	CIE CLASS	DIRECT	$\eta$ UP, DN (C180-360)	0.0,51.5
LAMPS INSIDE	1	$\eta$ up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	120	$\eta$ down (%)	100.0	CIBSE SHR MAX	0.60



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 24.3 °C  
 Operators:  
 Test Date: 2024-09-22

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity: 65.0%  
 Test Distance: 3.087m [K=1.0000]  
 Remarks:

**ZONAL FLUX DIAGRAM**

ZONAL FLUX DIAGRAM:

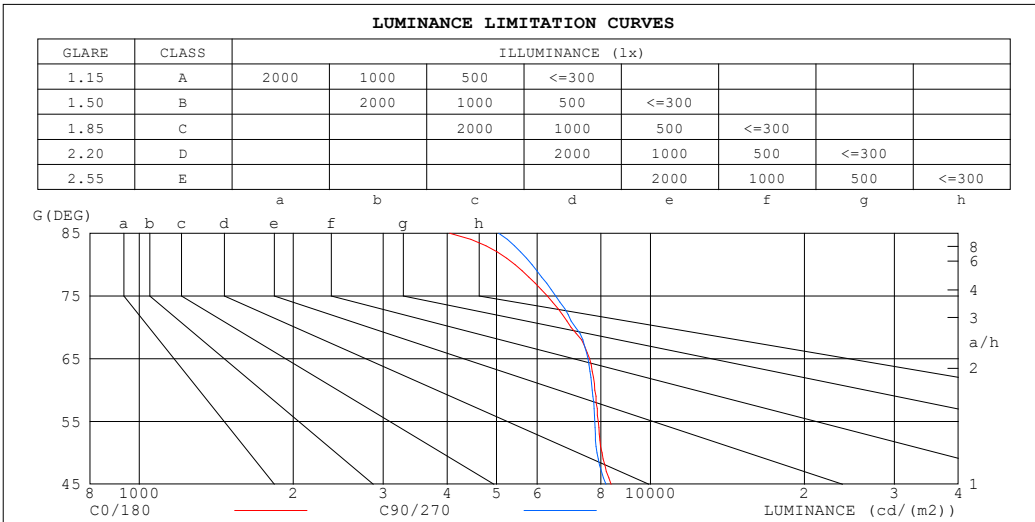
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	2234	2194	2200	2241	2275	2336	2336	2281	0- 10	238.4	238.4	22.7,22.7
20	1284	1214	1217	1240	1274	1342	1356	1318	10- 20	498.1	736.5	70.3,70.3
30	71.19	54.35	56.00	59.96	62.73	72.40	74.49	67.46	20- 30	232.0	968.5	92.4,92.4
40	27.30	26.30	26.74	28.54	28.44	28.53	28.39	27.17	30- 40	23.30	991.8	94.6,94.6
50	19.89	19.29	19.44	20.99	21.64	21.49	20.87	20.14	40- 50	18.22	1010	96.4,96.4
60	14.97	14.52	14.79	15.73	16.60	16.52	15.70	15.33	50- 60	16.10	1026	97.9,97.9
70	9.203	8.935	9.384	9.835	9.792	10.38	10.44	9.706	60- 70	12.65	1039	99.1,99.1
80	3.629	3.526	3.917	4.425	4.467	4.585	4.406	3.897	70- 80	7.156	1046	99.8,99.8
90	0.0815	0.0665	0.0776	0.1551	0.1345	0.0479	0.0579	0.0501	80- 90	2.047	1048	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3°C  
 Operators:  
 Test Date:2024-09-22

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.087m [K=1.0000]  
 Remarks:

**LUMINANCE LIMITATION CURVES**

Test:U:119.78V I:0.1137A P:13.422W PF:0.9858 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1047.95x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	TYPE:	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	4047	5045
80	5433	5864
75	6281	6527
70	6996	7133
65	7605	7547
60	7782	7692
55	7901	7778
50	8043	7861
45	8375	8178

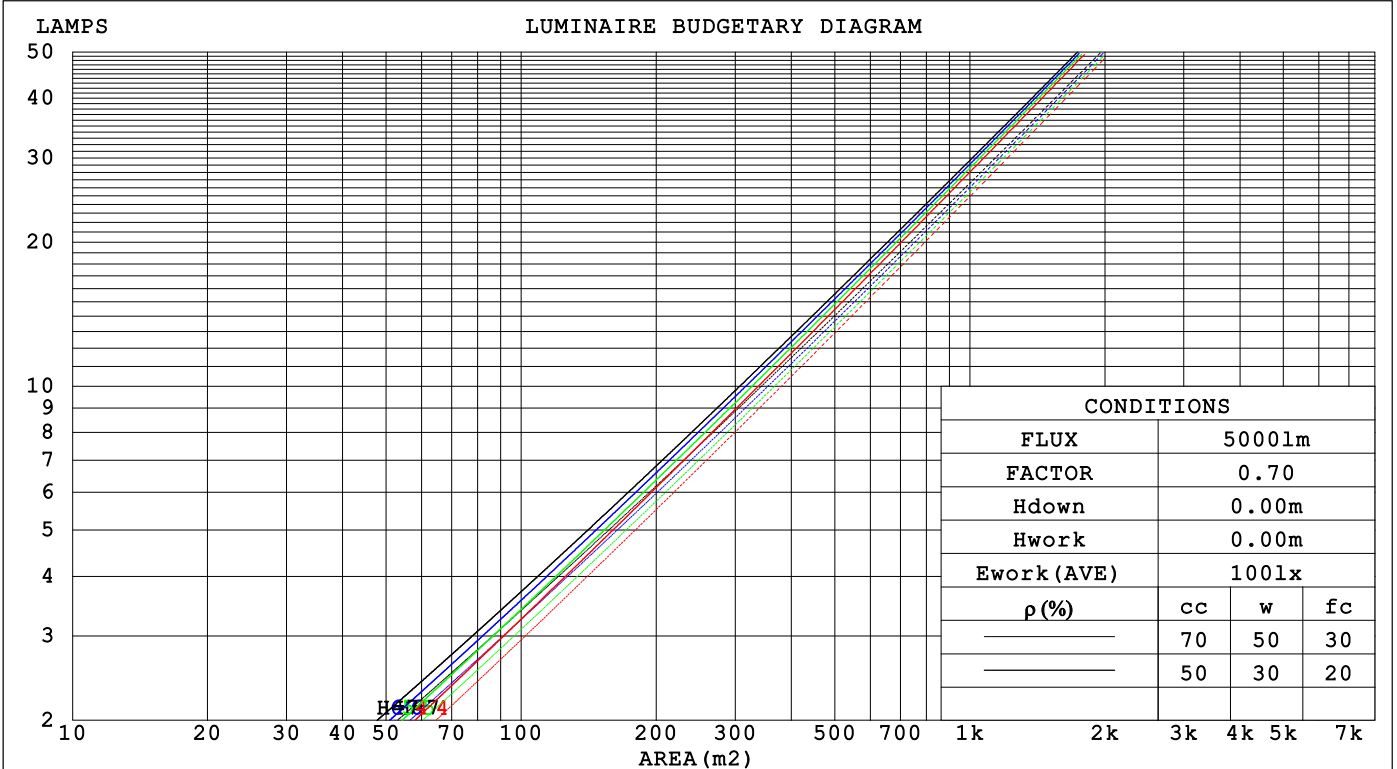
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 24.3 °C  
 Operators:  
 Test Date: 2024-09-22

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity: 65.0%  
 Test Distance: 3.087m [K=1.0000]  
 Remarks:

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

Test:U:119.78V I:0.1137A P:13.422W PF:0.9858 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1047.95x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	TYPE:	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															
	Coefficients of Utilization(CU)															
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.12	1.10	1.08	1.10	1.08	1.06	1.06	1.04	1.03	1.02	1.01	.00	.99	.98	.97	.95
2.0	1.06	1.02	.99	1.04	1.01	.98	1.01	.98	.96	.98	.96	.94	.95	.94	.92	.91
3.0	1.00	.96	.93	.99	.95	.92	.96	.93	.91	.94	.91	.89	.92	.90	.88	.86
4.0	.95	.91	.87	.94	.90	.87	.92	.89	.86	.90	.87	.85	.89	.86	.84	.83
5.0	.91	.86	.83	.90	.86	.83	.89	.85	.82	.87	.84	.81	.86	.83	.81	.79
6.0	.87	.83	.79	.87	.82	.79	.85	.81	.78	.84	.81	.78	.83	.80	.77	.76
7.0	.84	.79	.76	.83	.79	.76	.82	.78	.75	.81	.77	.75	.80	.77	.74	.73
8.0	.81	.76	.73	.80	.76	.73	.79	.75	.72	.78	.75	.72	.77	.74	.72	.71
9.0	.78	.73	.70	.77	.73	.70	.77	.73	.70	.76	.72	.69	.75	.72	.69	.68
10.0	.75	.71	.67	.75	.70	.67	.74	.70	.67	.73	.70	.67	.73	.69	.67	.66



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3 °C  
 Operators:  
 Test Date:2024-09-22

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.087m [K=1.0000]  
 Remarks:

**WEC AND CCEC**

Test:U:119.78V I:0.1137A P:13.422W PF:0.9858 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1047.95x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	TYPE:	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

$\rho_{CC}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.157	.089	.028	.151	.086	.027	.138	.079	.025	.127	.073	.023	.116	.067	.022	
2.0	.146	.080	.025	.141	.078	.024	.130	.073	.023	.121	.068	.021	.112	.063	.020	
3.0	.137	.073	.022	.132	.071	.021	.123	.067	.020	.115	.063	.019	.108	.060	.018	
4.0	.128	.067	.020	.124	.065	.019	.117	.062	.018	.110	.059	.018	.103	.056	.017	
5.0	.121	.061	.018	.117	.060	.018	.111	.058	.017	.105	.055	.016	.099	.053	.016	
6.0	.114	.057	.016	.111	.056	.016	.106	.054	.016	.100	.052	.015	.096	.050	.015	
7.0	.108	.054	.015	.106	.053	.015	.101	.051	.015	.096	.049	.014	.092	.048	.014	
8.0	.103	.050	.014	.101	.050	.014	.097	.048	.014	.093	.047	.014	.089	.046	.013	
9.0	.099	.048	.013	.097	.047	.013	.093	.046	.013	.089	.045	.013	.086	.044	.013	
10.0	.094	.045	.013	.093	.045	.012	.089	.044	.012	.086	.043	.012	.083	.042	.012	

$\rho_{CC}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.170	.157	.146	.145	.135	.126	.099	.093	.087	.057	.054	.051	.018	.017	.016	
2.0	.153	.133	.116	.131	.114	.100	.090	.079	.070	.052	.046	.041	.017	.015	.013	
3.0	.139	.113	.093	.119	.098	.081	.082	.068	.057	.047	.040	.033	.015	.013	.011	
4.0	.127	.098	.076	.109	.085	.066	.075	.059	.047	.043	.035	.028	.014	.011	.009	
5.0	.117	.086	.063	.100	.075	.055	.069	.052	.039	.040	.031	.023	.013	.010	.008	
6.0	.109	.076	.053	.093	.066	.047	.064	.046	.033	.037	.027	.020	.012	.009	.006	
7.0	.101	.068	.046	.087	.059	.040	.060	.042	.028	.035	.025	.017	.011	.008	.006	
8.0	.095	.062	.039	.082	.054	.034	.057	.038	.024	.033	.022	.014	.011	.007	.005	
9.0	.089	.056	.034	.077	.049	.030	.053	.034	.021	.031	.020	.013	.010	.007	.004	
10.0	.085	.052	.030	.073	.045	.026	.051	.032	.019	.030	.019	.011	.010	.006	.004	

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3°C  
 Operators:  
 Test Date:2024-09-22

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.087m [K=1.0000]  
 Remarks:

**UGR(Unified Glare Rating) Table**

Test:U:119.78V I:0.1137A P:13.422W PF:0.9858 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1047.95x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	TYPE:	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	12.0	12.7	12.2	12.9	13.1	11.9	12.7	12.1	12.8	13.0
3H	13.6	14.3	13.8	14.4	14.6	13.5	14.2	13.8	14.4	14.6
4H	14.1	14.8	14.4	15.0	15.2	14.1	14.8	14.4	15.0	15.2
6H	14.5	15.2	14.8	15.4	15.6	14.6	15.2	14.9	15.4	15.7
8H	14.6	15.2	14.9	15.5	15.7	14.7	15.3	15.0	15.6	15.8
12H	14.7	15.3	15.0	15.5	15.8	14.8	15.4	15.1	15.7	15.9
4H 2H	12.7	13.3	12.9	13.5	13.8	12.6	13.3	12.9	13.5	13.7
3H	14.4	15.0	14.7	15.2	15.5	14.3	14.9	14.7	15.2	15.5
4H	15.0	15.6	15.4	15.9	16.2	15.1	15.6	15.4	15.9	16.2
6H	15.5	16.0	15.9	16.3	16.7	15.6	16.1	16.0	16.4	16.7
8H	15.7	16.1	16.1	16.5	16.8	15.8	16.2	16.2	16.6	16.9
12H	15.7	16.1	16.1	16.5	16.9	15.9	16.3	16.3	16.7	17.1
8H 4H	15.3	15.7	15.6	16.1	16.4	15.3	15.7	15.7	16.1	16.4
6H	15.8	16.2	16.3	16.6	17.0	15.9	16.3	16.4	16.7	17.1
8H	16.1	16.4	16.5	16.8	17.2	16.2	16.5	16.6	16.9	17.4
12H	16.2	16.5	16.6	16.9	17.4	16.3	16.6	16.8	17.1	17.5
12H 4H	15.3	15.7	15.7	16.0	16.4	15.3	15.7	15.7	16.1	16.4
6H	15.9	16.2	16.3	16.6	17.1	16.0	16.3	16.4	16.7	17.1
8H	16.1	16.4	16.6	16.8	17.3	16.2	16.5	16.7	16.9	17.4
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.2 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				
2.0H	+ 0.2 / - 0.3					+ 0.1 / - 0.2				

CIE Pub.117, 1048 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 0.2)  
 Area: 0.0038465 m2

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3°C  
 Operators:  
 Test Date:2024-09-22

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.087m [K=1.0000]  
 Remarks:

**UTILIZATION FACTORS TABLE**

Test:U:119.78V I:0.1137A P:13.422W PF:0.9858 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0      Lamp Flux:1047.95x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	TYPE:	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

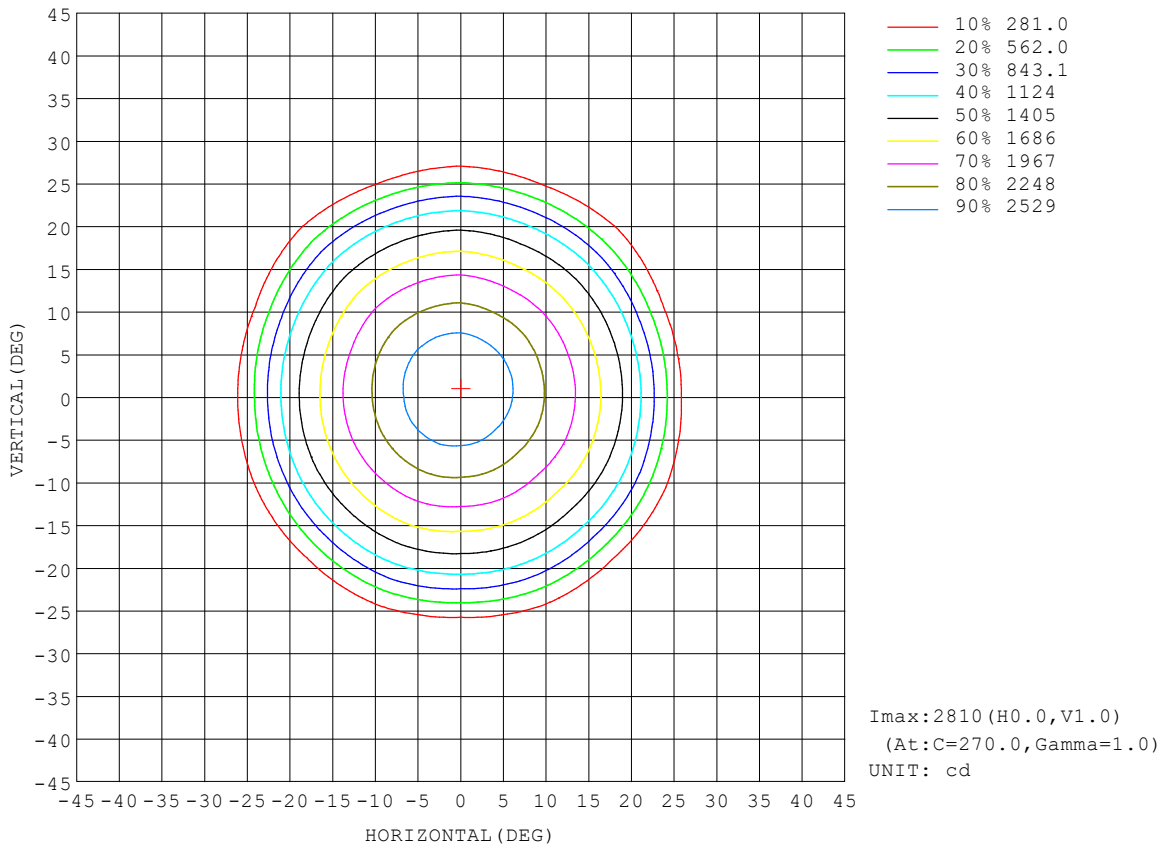
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	88	82	78	88	82	78	87	82	78	75
0.80	95	90	86	95	89	86	94	89	86	82
1.00	100	94	90	99	94	90	97	93	90	86
1.25	103	98	95	102	98	94	100	96	94	89
1.50	106	101	98	105	101	98	103	99	96	92
2.00	109	104	101	107	103	100	104	101	99	94
2.50	110	106	103	109	105	103	106	103	101	95
3.00	112	108	106	110	107	105	107	104	102	96
4.00	114	111	109	112	109	107	108	106	105	98
5.00	115	113	111	113	111	109	109	108	106	99
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 24.3 °C  
 Operators:  
 Test Date: 2024-09-22

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity: 65.0%  
 Test Distance: 3.087m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

Test:U:119.78V I:0.1137A P:13.422W PF:0.9858 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1047.95x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	TYPE:	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:



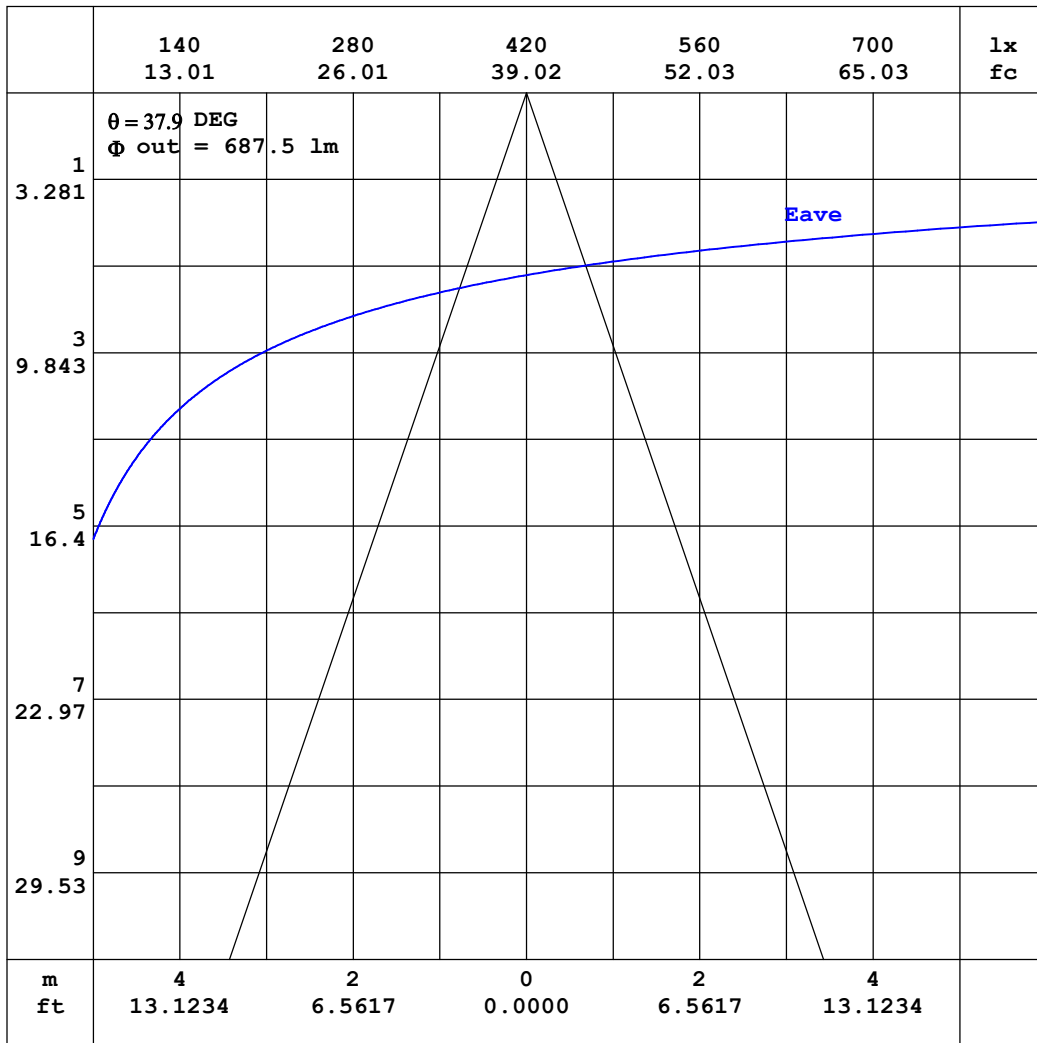
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3°C  
 Operators:  
 Test Date:2024-09-22

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.087m [K=1.0000]  
 Remarks:



**AAI CURVES**

Test:U:119.78V I:0.1137A P:13.422W PF:0.9858 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1047.95x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	TYPE:	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:



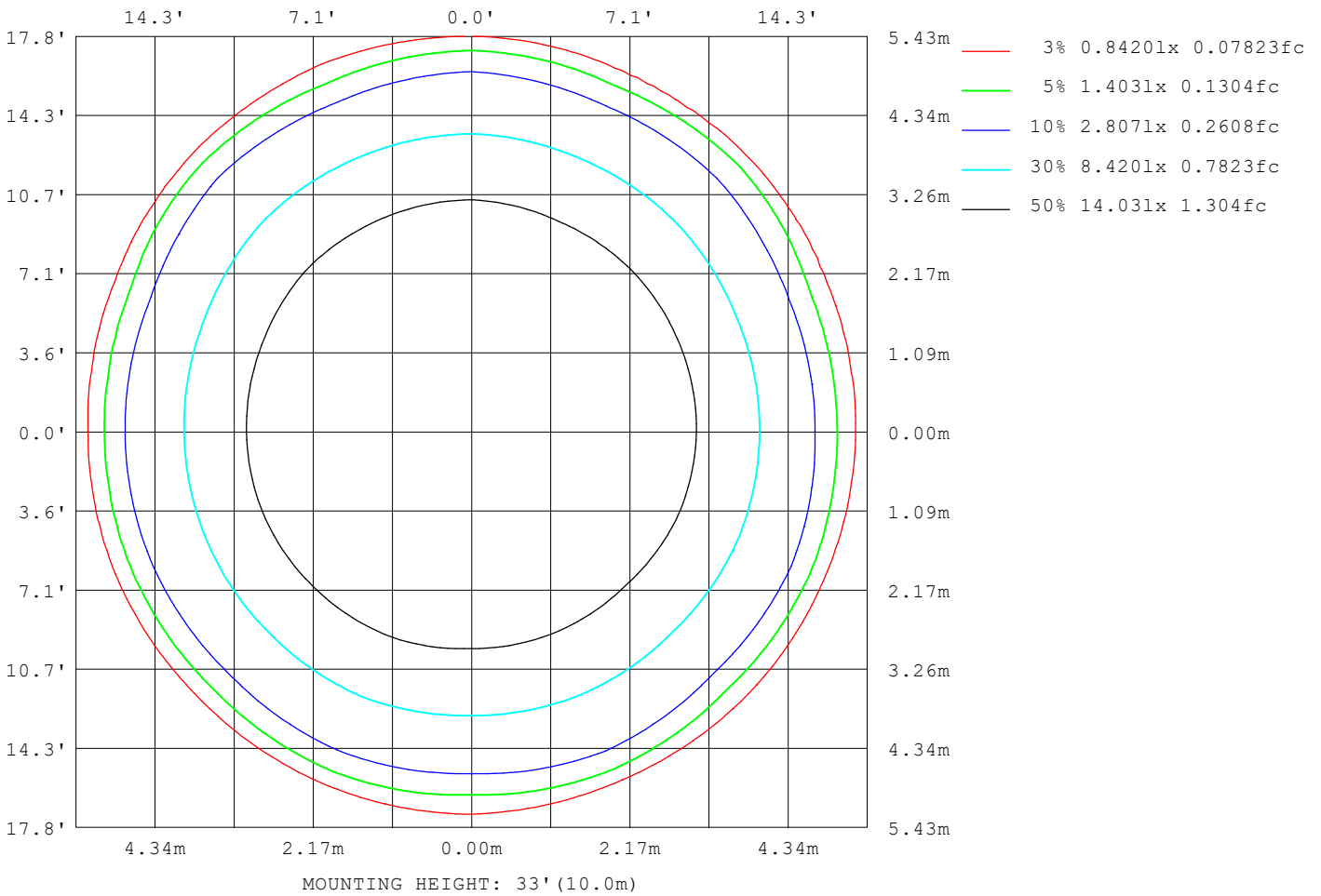
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 24.3 °C  
 Operators:  
 Test Date: 2024-09-22

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity: 65.0%  
 Test Distance: 3.087m [K=1.0000]  
 Remarks:

**ISOLUX DIAGRAM**

Test:U:119.78V I:0.1137A P:13.422W PF:0.9858 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1047.95x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	TYPE:	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3°C  
 Operators:  
 Test Date:2024-09-22

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.087m [K=1.0000]  
 Remarks:

**LED Avg.L Report**

Test:U:119.78V I:0.1137A P:13.422W PF:0.9858 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1047.95x1 lm		
NAME: AD-3-S15W-FC-5CCT-WH	TYPE:	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.: Light by Lotus	SUR.:	Shielding Angle:

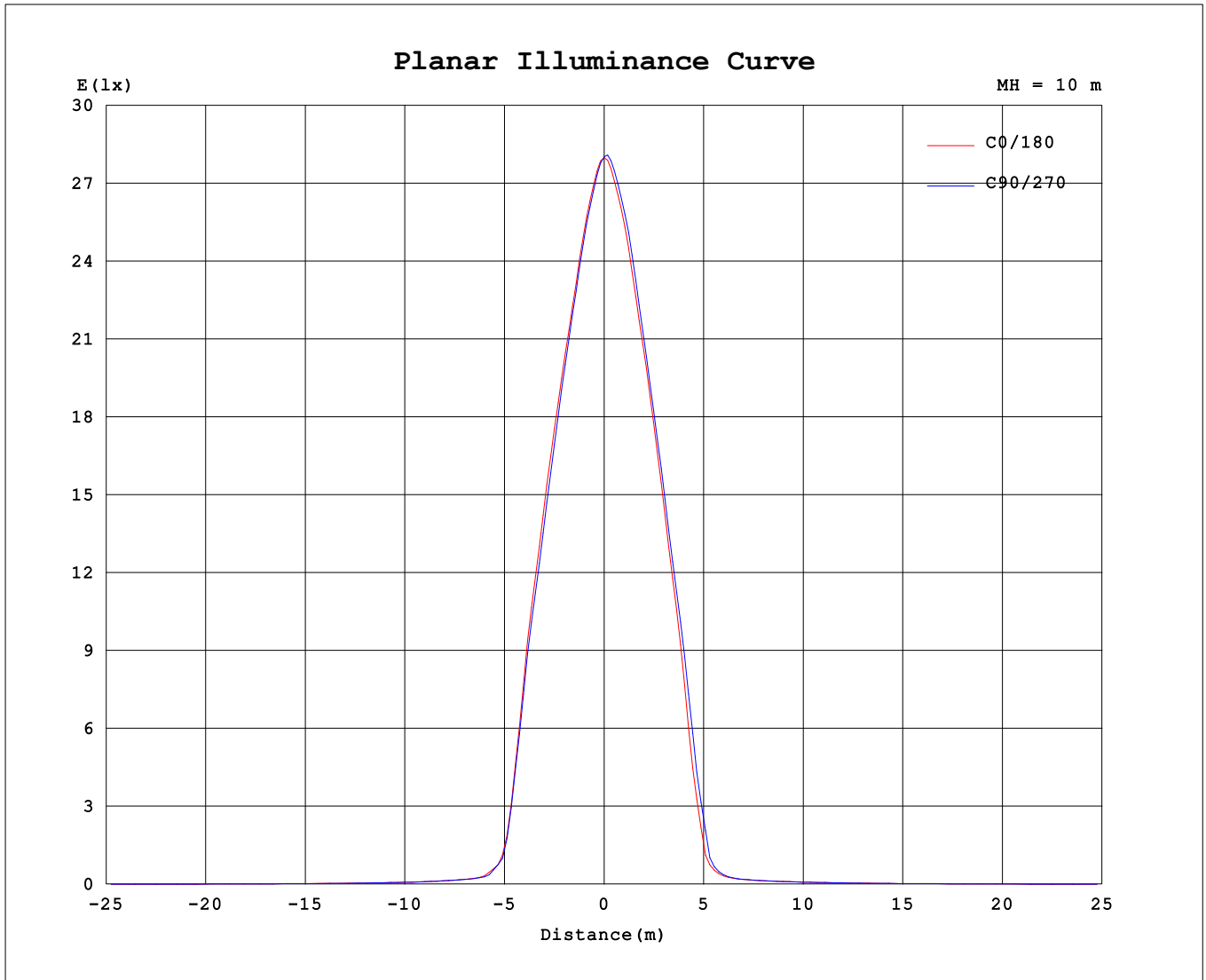
AvgL	cd/m2
L_0~180 (65) av	8065
L_0~180 (75) av	6644
L_0~180 (85) av	5220
L_90~270 (65) av	7814
L_90~270 (75) av	6905
L_90~270 (85) av	5463
L_45 (65) av	7891
L_45 (75) av	6761
L_45 (85) av	5404

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3℃  
 Operators:  
 Test Date:2024-09-22

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.087m [K=1.0000]  
 Remarks:

**Planar Illuminance Curve**



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 24.3 °C  
 Operators:  
 Test Date: 2024-09-22

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity: 65.0%  
 Test Distance: 3.087m [K=1.0000]  
 Remarks:

